# Mecklenburg County Common Code Defects

# Mechanical

#### **Code Defects**

Dryer exhaust missing or incorrect

## **Code Description**

- **504.1 Installation.** Clothes dryers shall be exhausted in accordance with the manufacturer's instructions. Dryer exhaust systems shall be independent of all other systems and shall convey the moisture and any products of combustion to the outside of the building.
- **504.2 Exhaust penetrations.** Ducts that exhaust clothes dryers shall not penetrate or be located within any fireblocking, draftstopping or any wall, floor/ceiling or other assembly required by the International Building Code to be fire-resistance rated, unless such duct is constructed of galvanized steel or aluminum of the thickness specified in 603.3 and the fire-resistance rating is maintained in accordance with the International Building Code.
- **504.3 Cleanout**. Each vertical riser shall be provided with a means for cleanout.
- **504.4 Exhaust installation.** Dryer exhaust ducts for clothes dryers shall terminate on the outside of the building and shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination. Ducts shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the exhaust flow. Clothes dryer exhaust ducts shall not be connected to a gas vent connector, gas vent or chimney. Clothes dryer exhaust ducts shall not extend into or through ducts or plenums.
- 504.5 Makeup air. Installations exhausting more than 200 cfm (0.09 m<sup>3</sup>/s) shall be provided with makeup air. Where a closet is designed for the installation of a clothes dryer, an opening having an area of not less than 100 square inches (0.0645 m<sup>2</sup>) shall be provided in the closet enclosure.
- 504.6 Domestic clothes dryer ducts. Residential dryer exhaust ducts which are not designed for a specific dryer shall be constructed of minimum 0.0157 inch (0.4mm) galvanized steel or other noncombustible material of equivalent strength corrosion resistance. The maximum length of ridgid metal duct shall not exceed 45 ft. (13719 mm) from dryer location to wall or roof cap. There shall be a deduction of 5 ft. (1524 mm) for each 45 degree (0.785 rad) bend and 10 ft. for

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each 90 degree (1.57 rad) bend. The maximum length of noncombustible flexible duct shall not exceed 25 ft.(7620 mm) from dryer to wall or roof cap. There shall be a deduction of 2-1/2 ft (762 mm) for each 45 degree (0.785 rad) bend and 5 ft (1524 mm) for each 90 degree (1.57 rad) bend. All wall or roof caps shall be nonscreened with backdraft damper and minimum size of 4 inches (102 mm). The entire exhaust system shall be properly secured in place.

### 504.6.1 Maximum length. Deleted.

**504.6.2 Rough-in required.** Where a compartment or space for a domestic clothes dryer is provided, an exhaust duct system shall be installed in accordance with 504.6 and 504.6.1.

**504.7 Commercial clothes dryers.** The installation of dryer exhaust ducts serving Type 2 clothes dryers shall comply with the appliance manufacturer's installation instructions. Exhaust fan motors installed in exhaust systems shall be located outside of the airstream. In multiple installations, the fan shall operate continuously or be interlocked to operate when any individual unit is operating. Ducts shall have a minimum clearance of 6 inches (152 mm) to combustible materials. Transition ducts shall not be concealed within construction. Exhaust ducts shall be constructed of a material equivalent in strength and corrosion resistance to a minimum of 0.0217 inch (0.55 mm) galvanized steel.

Disclaimer: There may be other ways to comply with the Code. If so, you are not required to use this method to comply with the Code. You may want to investigate other options, or consult with a design professional identifying an equally code compliant solution.

#### **End Notes**

North Carolina Plumbing Code & North Carolina Mechanical Code & North Carolina Fuel Gas Code. International Code Council Southern Building Code Congress